NUMBERS & ODDITIES

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-::: N&O #70, February 2004 :::-

Hi and welcome to the February issue of Numbers & Oddities. A short one I'm afraid. I had a lots of PC problems this month and lost ca. 2GB of logs and info and a large number of nearly finished articles. I still do not know what has happened but the PC crashed and on top of that the back-up cd's and zip disks appeared to have only empty directories. So I had to begin from scratch again. Luckily several members have sent their findings so that I could write a short column. Thanks for that! I also lost a number of e-mails. Should you have sent me mail and didn't get a reply, please send it again.

After a long break our Japanese friends Takashi and Adachi are back in our midst. Good to have you back gentlemen!

-0-0-0-0-0-0-0-0-0-0-

* VOICE STATIONS *

::: E03 & E04

The id's as used by the Lincolnshire Poacher and Cherry Ripe were compiled by Al and Tomonori. The Cherry Ripe schedule was validated by Tomonori. Thanks gentlemen!

Cherry Ripe schedules (E04)

UTC	frequencies
2200	18864, 24644 kHz
2300	18864, 21866 kHz
0000	18864, 21866 kHz
0100	19884, 21866 kHz
1000	20474, 23461 kHz
1100	18864, 23461 kHz
1200	18864, 23461 kHz

1300 18864, 21866 kHz
1400 18864, 20707 kHz

Lincolnshire Poacher E03
IDs as of February 1st, 2004

UTC	Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC
1200	12205	12205	12205	12205	12205	12205	12205	1200
1300	70244	70244	70244	70244	70244	70244	70244	1300
1400	52825	50193	52136	82338	12205	44128	44283	1400
1500	44283	52825	50193	52136	82338	12205	33574	1500
1600	33574	44283	52825	50193	52136	82338	44128	1600
1700	44128	33574	44283	52825	50193	52136	12205	1700
1800	12205	44128	33574	44283	52825	50193	82338	1800
1900	82338	70244	44128	70244	44283	52825	70244	1900
2000	70244	12205	70244	33574	70244	44283	52136	2000
2100	52136	82338	12205	44128	33574	70244	50193	2100
2200	50193	52136	82338	12205	44128	33574	52825	2200

IDs as of February 15th, 2004

UTC	Mon	Tue	Wed	Thu	Fri	Sat	Sun	UTC
1200	89174	89174	89174	89174	89174	89174	89174	1200
1300	09407	09407	09407	09407	09407	09407	09407	1300
1400	07352	54642	43449	56485	89174	80782	56119	1400
1500	56119	07352	54642	43449	56485	89174	69738	1500
1600	69738	56119	07352	54642	43449	56485	80782	1600
1700	80782	69738	56119	07352	54642	43449	89174	1700
1800	89174	80782	69738	56119	07352	54642	56485	1800
1900	56485	09407	80782	09407	56119	07352	09407	1900
2000	09407	89174	09407	69738	09407	56119	43449	2000
2100	43449	56485	89174	80782	69738	09407	54642	2100
2200	54642	43449	56485	89174	80782	69738	07352	2200

Cherry Ripe E03A
IDs as of Feb 6th, 2004

UTC	Sun	Mon	Tue	Wed	Thu	Fri	UTC
0000		61672	01476	25772	47202	54818	0000
0100		01476	25772	47202	54818	02856	0100
1000		?	47202	54818	?	25547	1000
1100		47202	54818	?	?	25772	1100
1200		?	?	25547	?	61672	1200
1300		?	25547	?	61672	01476	1300
1400							1400
2200	25547	25772	61672	?	25772		2200
2300	25772	61672	01476	25772	47202		2300

Cherry Ripe E03A
IDs as of Feb 13th, 2004

UTC	Sun	Mon	Tue	Wed	Thu	Fri	UTC
0000		61672	01476	25772	47202	54818	0000
0100		01476	25772	47202	54818	02856	0100
1000		?	?	54818	?	?	1000
1100		?	54818	02856	?	?	1100
1200		?	02856	25547	25772	61672	1200
1300		?	25547	25772	?	?	1300
1400							1400
2200	25547	25772	61672	01476	25772		2200
2300	25772	61672	01476	25772	47202		2300

Cherry Ripe E03A
IDs as of Feb 20th, 2004

UTC	Sun	Mon	Tue	Wed	Thu	Fri	UTC
0000		09744	78379	99220	21618	11847	0000
0100		78379	99220	21618	11847	69821	0100
1000		?	?	?	?	18569	1000
1100		?	11847	?	?	99220	1100
1200		?	69821	?	99220	09744	1200
1300		?	?	?	?	?	1300
1400							1400
2200	18569	99220	09744	78379	99220		2200
2300	99220	09744	78379	99220	21618		2300

<<<<<>>>>>

::: E10

6498 kHz, 18-2, PCD 1
6270 kHz, 20-2, ULX 1
6270 kHz, 16-2, ULX 1

(logs from Adachi and Bob)

<<<<<>>>>>

::: E25

Manolis from beautiful Greece reported E25 on the Enigma 2000 mailing list. Here are his findings:

9450 kHz AM, 1234 UTC, 11-2: "277 1" repeated.
9450 kHz AM, 1245 UTC, 17-2: "780" repeated; "message" (3x)
9549 6501 0210 3553 1254

7559 0481 6642 3755 0210
"Repeat" (3x)
...
"End of message"
"785 41" ca. 4 times
"End of transmission" at 12:51 UTC.

Good to have you back, Manolis and good to hear that E25 is still alive.

<<<<<>>>>>

::: V24

Takashi has heard North Korean V24 on 12-2 from 1400 to 1436 UTC.

<<<<<>>>>>

::: V26

Another one reported by Takashi:

Chinese and English YL on 9101 kHz in LSB at 1152 UTC.

<<<<<>>>>>

::: V27

Another observation from Takashi is a Chinese female numbers station that transmits in LSB. Most probably V27. It can be heard on three parallel frequencies 5924//6488//8621 kHz. The transmissions start at ca. 2035 JST (= 0535 UTC).

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* MORSE STATIONS *

Observations by Fritz, Takashi, Tony, Tomonori, Japan Ute Monitor and myself.

::: M01A

4427 kHz, 30-1, 1955 UTC: 111 555 88120 88120 87154 87154 89546 89546
83489 83489 111 000
5262 kHz, 30-1, 1025 UTC: 07684 05638 55128 48836 31233 28966
67035 = 215 16 111 55128 111 000
3577 kHz, 18-2, 2019 UTC: 333 10981 10981 (x6)
333 19803 19803 (x6)
333 19131 19131 (x6)

111 000

<<<<<>>>>>

::: M10E

5705 kHz, 24-2, 0835 UTC:
   .... 08 08 18 18 == 5FG(x18,rptd) ==
   08 08 18 18 08 08 18 18 62901 62901 62901 96 96 15 15 ==
   5FG(x15,rptd) ==
   96 96 15 15 67065 67065 67065 32 32 17 17 ==
   5FG(x17,rptd) == 32 32 17 17 000

<<<<<>>>>>

::: M16

14931 kHz, 8BY: VVV 8BY 8BY 8BY 68/ 16
20946 kHz, 8BY: 323 / 912 / 682 / 190 / 661 VVV VVV

<<<<<>>>>>

::: M21

The following article was published by Interfax in Russia.
(http://www2.interfax.ru/eng/news/politics/040208/40830/story.html)

   MOSCOW. Feb 8 (Interfax) - Russia's radar engineering troops detected more than 1,000 foreign combat and spy planes in the vicinity of the Russian border in 2003, radar troops chief Alexander Shramchenko told Interfax.

   In total, over 500,000 radar targets were detected last year, including over 80,000 foreign, he said.

   The intensity of foreign combat and spy planes' flights did not decrease in 2003, and the radar troops were alerted 16% more often, said Shramchenko. "The air situation was particularly disturbing in the Northwestern, Central, North Caucasian and Kaliningrad air defense zones," the general said.

   Up to 40% of the radar engineering troops' units, as well as radar intelligence groups and dual-purpose radars of the State Civil Aviation Service were used to monitor Russia's air space, he said. The system of gathering and processing information, and controlling the use of the country's air space is being perfected, Shramchenko said.

(Thanks for the tip JMM)

The Air Defense stations are using satellites of course but their terrestrial backup and training facilities are still on the air on shortwave. The stations were heard on the following frequencies in February:

```
 3322.0 kHz, 23-2, 2035 UTC, ID 0, QSA 0/1
 4059.0 kHz, 20-2, 2058 UTC, ID 0, =992358??0?????

 4951.5 kHz, 13-2, 1934 UTC, ID 0, =992243??0?????
 4071.5 kHz,  9-2, 1257 UTC, ID 8, =991558??8?????
 4973.5 kHz, 19-2, 1638 UTC, ID 0, =991938??0?????
 5063.0 kHz,  7-2, 0723 UTC, ID ?, =1830516 23
 5198.0 kHz, 13-2, 1538 UTC, ID 0, =991837??0?????
 5254.0 kHz,  7-2, 0703 UTC, USB voice tracking reports "096 91515 03"
              8-2, 2155 UTC, USB voice tracking reports
 6906.0 kHz,  5-2, 2353 UTC, ID 8, =99253??8?????
10335.0 kHz, 17-2, 1006 UTC, ID 0, =991305??0?????
```

<<<<<>>>>>

::: M21 variants

```
6912.5 kHz, 17-2, 1530 UTC: 970 1915649710
                            970 3919213910
                            970 5919615910
                            970 5919611410

3301.0 kHz, 13-2, 2027 UTC: PSNN with messages

3350.5 kHz, 3-2, 1655 UTC:  KUQI =951 1919272254
                            =951 3119213854
                            =950 0918218254

5827.5 kHz, 7-2, 1552 UTC:  900 4336
                            900 4718222152
                            900 572854922152
                            900 1718642154
                            900 17180
```

<<<<<>>>>>

::: M22

The Israeli Navy in Haifa is quite busy on a number of frequencies: 2680, 2800, 4241, 4331, 5159, 6379, 8103, 10046, 12984 kHz.

Fritz observed a couple of irregularities:

 4241 temporarely shifted to 4242.2 (18/22-2). Reason: QRM RTTY
 5001 additional frequency (2/8-2). Reason: unknown
 5159 temporarely shifted to 5160.2 (22/24-2). Reason: QRM RTTY
18001 additional frequency (30-1/2-2). Reason: unknown, did same
      last year, same time. (That is odd!)

<<<<<>>>>>

::: M40

 8232 kHz, 24-12-03, 2235 UTC: VVV CQ 747.816
                               CQ 816 CQ 816 HR HR 36 36 = =
                               Then numbers, ending AR AR SK SK
10620 kHz, 06-02-04, 2235 UTC: VVV CQ747.494 VVV CQ 747.494
                               CQ 494 HR HR 1T 1T = =
                               Numbers + AR SK SK
 8260 kHz, 01-03-04, 0431 UTC: VVV CQ 747.520
Also heard at 1030 UTC on 10620 kHz.

<<<<<>>>>>

::: M51

 4769 kHz   19-2, 1645 UTC
 5309 kHz   24-2, 1351 UTC nr 78 f 24 14:51:22 2004 = 5LG(x100)
 5335.5//5148 kHz   12-2, 1955 UTC nr 76 f 12 20:55:12 2004 = 5LG(x100)
 5406//4039 kHz   23-2, 1515 UTC
 5429 kHz   3-2, 1600 UTC
 5455 kHz   5-2, 1945 UTC
 5769//4441   kHz   18-2, 1545 UTC
 5769 kHz   19-2, 0815 UTC
 5824.5//4029.5 kHz 23-2, 1920 UTC
 6963 kHz   28-1, 1647 UTC
 6976.5 kHz   2-2, 1650 UTC
10688 kHz   12-2, 1035 UTC

<<<<<>>>>>

::: M62

3485 kHz, 1/10-2, 24/7 B3ET B3ET B3ET = RNJ5 RNJ5 RNJ5 +
3485 kHz, 11/20-2, 24/7 J7XD J7XD J7XD = D3QK D3QK D3QK +
3485 kHz, 21/29-2, 24/7 QR2U QR2U QR2U = KP6F KP6F KP6F +
1732 kHz, 1/29-2, QSA NIL
3485 kHz, 1/29-2, very faint, audible around 1500z

<<<<<>>>>>

::: M89

V LA5S LA5S LA5S DE NH8T NH8T   4874//5382, 8042 kHz

V GM3W GM3W GM3W DE PNW9 PNW9   5629.3 kHz

V MW3D MW3D MW3D DE 2SLC 2SLC   3330//4440//5580//7074 kHz
+ message "BT 1200 / 377 NR / 6038 BT 20460 09338 / 1200 377 // BT AR"

<<<<<>>>>>

::: M91

4820 kHz, 1/29-2, 0730-1700 UTC
3996 kHz, 1/29-2, 0730-1700 UTC last heard 4 Feb.
2362 kHz, 1/29-2, 1700-0730 UTC
2852 kHz, 1/29-2, 1700-0730 UTC QSA NIL

Sample messages.

4820 kHz, 4-2, 1645 UTC, V8N7 marker
4820 kHz, 4-2, 1700 UTC, V8N7 de V4E4 372 col 372 + (Frequency changes)
4820 kHz, 8-2, 1500 UTC, Q5HW marker
4820 kHz, 8-2, 1510 UTC, Q5HW de NZM8 QTC 54 20 08 1608 780 = Q5HW =
                         5LG(x20) = for Q5HW rpt QLN +

<<<<<>>>>>

::: MX

Cluster beacons reported in February:

Cluster 4558 kHz: C
Cluster 5154 kHz: C
Cluster 7039 kHz: C, K, M, S
Cluster 8495 kHz: C, F, M
Cluster 10872 kHz: C, F, K, M, S
Cluster 13528 kHz: F, K, M, S
Cluster 16332 kHz: C, F, K, M, S
Cluster 20048 kHz: C, K, M, S

Note: "M": Magadan beacon, 8-2, 2321 UTC on 7039.8. Still off normal
      frequency of 7039.4 kHz.

Channel markers:

L: 3336, 3336.3, 4091.2, 4091.8, 8183.6 kHz. As you can see it's
   transmitter seems a bit shaky lately. 8183.6 could be a harmonic.

P: 4043 kHz.

R: 4325.8 kHz.

V: 3658 kHz.

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* VARIOUS MODES *

S28: 4625 kHz, the Buzzer.

S30: 3756 kHz, the Pip.

XSW: 3828.9 kHz, the Squeaky Wheel channel marker.

XW : 5029 and 10032 kHz, Backward music, aka whales, aka audio feedback.

XSL: 4155, 6249, 6488 kHz, The Slot Machine (Japanese Navy)

M42: 11150 kHz, 0930 UTC, 5-2, link 00020.

-0-0-0-0-0-0-0-0-0-0-

* UNID STATIONS *

UNID 1.

4993 kHz, daily, 1600 UTC: UXSF repeated for 2 or 3 minutes, hand keyed,
                           sometimes late, sometimes errors ("k" in
                           between or starts in FSK mode)

<<<<<>>>>>

UNID 2.

16240 kHz, 19-2, 0850 UTC: KNA KNA KNA 88568 88568 (x3)
                           KNA KNA KNA 79849 79849 (x3)
                           KNA KNA KNA 73396 73396 (x3)
                           messages every few minutes

<<<<<>>>>>

UNID 3 (M??).

5230 kHz, 17-02, 1325 UTC: ....
91859 91859 (rptd) (dashes for about 30 sec)
79579(x3) 12907(x3) 79579(x3) 12709(x3)
79579(x3) uses short zero, hand sent

<<<<<>>>>>

UNID 4.

4040 kHz, 18-02, 2050 UTC: fm 485 349 for 904 155
fm 532 710 for 532 914
fm 485 695 for 485 349 etc.

Hand sent. Mode is FSK. 5201, 4925 and 4491 kHz have been used in 2003.

<<<<<>>>>>

UNID "PIP" STATIONS.

Last year a number of mysterious "pip" stations were reported; mainly from the Far East. Takashi and the Japan Utility Monitor both have reported a couple of these pip stations for the first time since months. They are possibly of Russian origin. Clues anyone???

2-second pip station can be heard on 3115, 5455, 8340, 10470 and 14425 kHz. 8340 kHz is on the air 24 hrs a day. The transmissions on 10470//14425 kHz start around 2300 UTC and sign off around 1030 UTC. 3115//5455 kHz start at ca. 1030 UTC and sign off at ca. 2300 UTC. Occasional "messages" are being sent, consisting of the letter of "Z", inverted "Z" (..--) or (----). Both are Cyrillic letters.

The Iranian "tick" was heard on 14000 and 21000 kHz by Wolf. (See also N&O #69).

<<<<<>>>>>

UNID "2".

Another oddity as reported by Takashi and Tomonori: an unid station transmitted a "2" every 30 secs on 10140.5 kHz in CW at 0822 UTC on 28 February.

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* MILITARY STATIONS *

::: RUSSIAN / CIS MILITARY STATIONS

Frequency	Callsigns / Remarks
18.1	RDL: Russian Military VLF Sites Tashkent and Arkhangelsk
2713	1RM7, FDOK, T6TA
2737	REA4: Air Force HQ Moscow // 4179 and 7018 kHz
2839	1BV7
3299	KPT9, 6X4Y, KLSH
3301	TCZU, 9EX3, SHFE, W8BH
3354	JKY4, X4ZV, PKY4, 1BV7, P1HK, PKMT, PZV1, 6X9G
3364	VXGA, NJ3X
3582	VXGA, 5UOW
3826	ESUP, XOX5, DJNB, EPZ1, 4GWM, IKJ8,9ICB. Flash message XXX ESUP 79258 BEZSTROKOWYJ 029
4179	REA4: Air Force HQ Moscow // 2737 and 7018 kHz
4554	7RU8. Flash message XXX XXX XXX 7RU8 17181 KIPER 8402
6488	JJSA, SH5N
7018	REA4: Air Force HQ Moscow // 4179 and 2737 kHz
7632	RJS: Russian Navy Vladivostok 0030 CW sending "RJS QSL QRR3" then V's. Later working RGK39."RGK39 RGK39 de RJS RJS QSA?" At 0555, sending 5FGs. At 0600, working RMAZ then RJQ60.
8816	26858: Russian Naval Aircraft 1630 CW Works RJF94/Moscow Aero Stn and RCB/Western Sector Aero Stn with message "QQL ULOL 1628 QRE UWMS 1720 QAH 5400 QBD 0400". RJC48: Russian Navy Southern Sector Aero Stn 1406 CW Wkg aircraft 26896 who sends "QAL XRRT 1435 K" to RJC48 and RJF94/ Moscow Sector Aero Stn.
11688	RCV transmits NAWIP and PROGNOZ (=FORECAST in russian), e.g.: RIP90 de RCV QTC 494 38 12 1640 494 = NAWIP 032 2583 KARTA 35212 TURCIjA GELIBOLU STRELxBY 16 PO 18 DEK 0600 DO 1700 RAJONE 40/32/7 S 026/55/7 W 40/32/0 S 026/57/0 W 40/30/0 S 026/52/0 W 40/31/0 S 026/51/6 W OTM …TOT NR 18 1800 DEK RKZ 270 43 28 1615 270 = PROGNOZ OT 1800 29 DO 1800 31 jANWARjA SREDIZEMNOE MORE WOSTOK TARTUS WOSTOËNYJ jUGO WOSTOËNYJ 6/9
12152	4OZT, C1OM, 6YKH, D1DR

<<<<<>>>>>

::: UKRAINIAN MILITARY STATIONS

Frequency	Callsigns / Remarks
3176	3N5X, ETI7, A8LV

```
  3211    4IYC
  3741    FBH3, HXZ5
  3775    2ZSO, 2DP7
  3825.7  2A3G, C1WP d
  3863    WEGH, 2EQ7, 6JZ1, DLCB
  3893    8VDT, BO6M, JZL8, 3DN1, NAI7, HMQY, 2DNV, PYUS, HMQ4
  4234    TDW8, TZPE
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* INTELLIGENCE NEWS *

::: ISRAEL

The Jersualem Post published an interesting item on March 2.

> "A secret Israeli intelligence unit, known as Unit 8200, broke a sophisticated Iranian code enabling Israel to monitor communications, including contacts with Pakistan regarding the development of Iranian nuclear weapons, the New Yorker magazine reported on Tuesday. According to the report, Israeli intelligence has created strong ties in Iran over the year, some of which exist till today."

<<<<<>>>>>

::: UK

Prime Minister, Tony Blair, recently announced that British intelligence would recruit more secret agents to fight terrorism. The interest was stunning. More than 3000 people responded to MI5's advertisement but only a handful of the new applicants could expect to make it through the recruitment process. (Rotterdams Dagblad)

<<<<<>>>>>

::: BRUNEI

The Star reports that Brunei has detained two retired senior army and police intelligence officers and a businessman on subversion allegations for leaking government secrets, some of them posted on the Internet.

The former policeman also was accused of treason for spying after allegedly transferring classified documents to an unidentified foreign country, the government said in a statement.

<<<<<>>>>>

::: NEW ZEALAND

Representatives of New Zealand's Green Party and the left wing Alliance Party protested against the satellite station in Waihopai. The Christchurchís Anti-Bases Campaign describes the Waihopai installation as a spy base because they say it is a key component of the super-secret world network of electronic listening posts, codenamed Echelon. The ABC claims that Waihopai's two giant domes, which contain satellite interception dishes, make New Zealand a direct contributor to US President George Bush's wars in Afghanistan and Iraq, and in any future unilateral military operation Washington may launch. (The New Standard)

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* LOGS SECTIONS *

2800	M22	4XZ. VVV marker CW 22-2-2004 1918 (TY)
2844.0	E10	in progress USB 10-2-2004 Tue 0109 (GG)
3025.0	M08a	ID 71281 17871 27002 CW 14-2-2004 Sat 1000 (MS)
3150.0	E10	in progress USB 1-2-2004 Sun 0035 (GG)
3150.0	E10	PCD 2 msgs: 120 RQESI/54 FUBJB USB 6-2-2004 Fri 1930 (GG)
3150.0	E10	PCD USB 11-2-2004 Wed 0230 (BS4)
3150.0	E10	PCD2 USB 22-2-2004 Sun 0300 (BS4)
3150.0	E10	PCD2 USB 23-2-2004 Mon 0230 (BS4)
3150.0	E10	PCD2//3150 USB 25-2-2004 Wed 2300 (BS4)
3244.0	M08a	ID 20301 33701 28922 CW 14-2-2004 Sat 1000 (MS)
3270.0	E10	CIO2//5230 USB 17-2-2004 Tue 0145 (BS4)
3292.0	V02a	V2a, fair/readable, ID is 23003 60165 65121 USB 3-2-2004 Tue 0200 (CA2)
3330	M89	V MW3D MW3D MW3D DE 2SLC 2SLC CW 8-2-2004 (TY)
3336.0	MX	Beacon "L" active, fair/readable on receiver in Germany USB 1-2-2004 Sun 2200 (CA2)
3336.2	MX	Channel marker "L" CW 6-2-2004 Fri 2246 (AB)
3360.0	E10	VLB2//4780 AM 17-2-2004 Tue 0145 (BS4)
3373.0	S04	S4, fair to weak/mostly readable on rcvr in Sweden, ID is 246 LSB 10-2-2004 Tue 2245 (CA2)
3415.0	E10	ART2//5435 USB 21-2-2004 Sat 2230 (BS4)
3415.0	E10	ART2//5435 USB 26-2-2004 Thu 2230 (BS4)
3522.0	M10	555x3 (Too weak, uncopiable)(//freq 5027m) CW 14-2-2004 Sat 0210 (MS)
3640.0	E10	SYN2//5170 USB 17-2-2004 Tue 0145 (BS4)
3658	MX	Channel marker "V" CW 6-2-2004 Fri 2247 (AB)
3756	S30	The pip CW 6-2-2004 Fri 2246 (AB)
3810.0	M10	M10, fair/readable on receiver in Sweden, into message USB 1-2-2004 Sun 1920 (CA2)
3823	S21	323, much QRM (AM) 19-2-2004 Thu 1842 (HFD)
3828.9	XSW	Squeaky Wheel channel marker 6-2-2004 Fri 2247 (AB)

```
3840.0  E10    in progress USB 10-2-2004 Tue 0109 (GG)
3840.0  E10    YHF 27 RSCPL USB 12-2-2004 Thu 0000 (GG)
3840.0  E10    YHF 27 ??C?? (CW QRN) USB 13-2-2004 Fri 0000 (GG)
3840.0  E10    YHF 27 RSCPL USB 14-2-2004 Sat 0000 (GG)
3840.0  E10    YHF 27 RSCPL USB 15-2-2004 Sun 0000 (GG)
3840.0  E10    YHF 27 RSCPL USB 16-2-2004 Mon 0000 (GG)
3840.0  E10    YHF 27 RSCPL USB 17-2-2004 Tue 0000 (GG)
3840.0  E10    YHF 27 RSPCL USB 19-2-2004 Thu 0000 (GG)
3840.0  E10    YHF 98 IQDRY//4560 USB 19-2-2004 Thu 0330 (BS4)
3840.0  E10    YHF2 USB 19-2-2004 Thu 2300 (GG)
3840.0  E10    YHF 27 RSCPL USB 20-2-2004 Fri 0000 (GG)
3840.0  E10    YHF 27 RSCPL USB 21-2-2004 Sat 0000 (GG)
3840.0  E10    YHF 37 WJRUR USB 22-2-2004 Sun 0000 (GG)
3926.0  M08a   ID 41121 61684 78751 CW 8-2-2004 Sun 1000 (MS)
3926.0  M08a   ID 20302 28923 33702 CW 15-2-2004 Sun 1000 (MS)
3926.0  M08a   (in progress - too weak to copy) CW 15-2-2004 Sun 1100
4017.0  V02a   V2a, fair/readable, ID is 11472 54104 90583 USB
               3-2-2004 Tue 0300 (CA2)
4027.0  M08a   ID 20301 33701 28922 (rpt of 1000z on 3244m) CW
               14-2-2004 Sat 1100 (MS)
4035.0  V02a   V2a, fair/readable, into message USB 4-2-2004 Wed 1200
                (CA2)
4071.5  M21    Russian Air Defense. BT991558??8?????? CW 9-2-2004
               1257 (TY)
4091.2  MX     Channel marker "L" CW 8-2-2004 Sun 1440 (AB)
4155.0  XSL    USB 6-2-2004 Fri 1300 (JK)
4173.0  M08a   ID 41121 61684 78751 (rpt of 1000z on 3926m) CW
               8-2-2004 Sun 1100 (MS)
4174.0  V02a   V2a, fair/readable, ID is 79403 69482 87503 USB
               2-2-2004 Mon 0300 (CA2)
4270.0  E10    in progress USB 1-2-2004 Sun 0035 (GG)
4270.0  E10    PCD 2 msgs: 120 RQESI/54 FUBJB USB 6-2-2004 Fri 1930
               (GG)
4270.0  E10    slow PCD USB 27-2-2004 Fri 0020 (DWC)
4325.0  MX     Beacon "R" active, fair/readable on receiver in
               Germany, cover USB 1-2-2004 Sun 2200 (CA2)
4331.0  M22    in progress CW 9-2-2004 Mon 0006 (GG)
4440    M89    V MW3D MW3D MW3D DE 2SLC 2SLC CW 8-2-2004   (TY)
4461.0  E10    FTJ USB 4-2-2004 Wed 2330 (BS4)
4461.0  E10    FTJ 28 KEOPC USB 8-2-2004 Sun 0100 (BS4)
4461.0  E10    FTJ 28 KEOPC USB 9-2-2004 Mon 0100 (BS4)
4461.0  E10    FTJ USB 9-2-2004 Mon 2300 (BS4)
4461.0  E10    FTJ 20 ????R weak USB 15-2-2004 Sun 2000 (GG)
4461.0  E10    FTJ2 USB 17-2-2004 Tue 2330 (BS4)
4461.0  E10    FTJ 23 JYDIX USB 18-2-2004 Wed 0100 (BS4)
4461.0  E10    FTJ 98 VFXCI USB 19-2-2004 Thu 0300 (BS4)
4461.0  E10    FTJ2 USB 19-2-2004 Thu 2300 (GG)
4461.0  E10    FTJ USB 20-2-2004 Fri 2000 (GG)
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4461.0 E10   FTJ 60 FAAR? USB 21-2-2004 Sat 2000 (GG)
4461.0 E10   FTJ USB 22-2-2004 Sun 0300 (BS4)
4461.0 E10   FTJ 60 ?AARM USB 22-2-2004 Sun 2000 (GG)
4461.0 E10   FTJ2 USB 24-2-2004 Tue 2330 (BS4)
4461.0 E10   FTJ 20 XZDWN, 93 AMDHT USB 25-2-2004 Wed 2300 (BS4)
4461.0 E10   FTJ 20 XZD?N, ?? ????? USB 26-2-2004 Thu 2300 (BS4)
4461.0 E10   FTJ USB 28-2-2004 Sat 2200 (BS4)
4462   G22   186 Nr. 247 grp 030=09348 (AM) 19-2-2004 Thu 2300
4463.0 G22   calling 186 USB 19-2-2004 Thu 2300 (GG)
4478.0 M08a   ID 71281 17871 27002 (rpt of 1000z on 3025m) CW
               14-2-2004 Sat 1100 (MS)
4519   G06   271-589/ 47=09172 (AM) 26-2-2004 Thu 1830 (HFD)
4558   MX   Cluster beacon "C". Faster than normal CW 6-2-2004 Fri
                2245 (AB)
4560.0 E10   YHF2 USB 9-2-2004 Mon 2300 (BS4)
4560.0 E10   YHF USB 10-2-2004 Tue 2230 (BS4)
4560.0 E10   YHF 42 PHAAH USB 11-2-2004 Wed 0230 (BS4)
4560.0 E10   YHF 41 ZITFY USB 17-2-2004 Tue 2230 (JS3)
4560.0 E10   YHF 98 IQDRY//3840 USB 19-2-2004 Thu 0330 (BS4)
4560.0 E10   YHF in tfc USB 23-2-2004 Mon 0230 (BS4)
4560.0 E10   YHF 41 ZITFY USB 25-2-2004 Wed 2230 (JS3)
4560.0 E10   YHF2 USB 25-2-2004 Wed 2300 (BS4)
4560.0 E10   YHF 15 ATZIE USB 27-2-2004 Fri 1900 (GG)
4594   M01B   514-737/34=92##9 (CW) 12-2-2004 Thu 2135 (HFD)
4625   S28   The buzzer 6-2-2004 Fri 2304 (AB)
4687.0 M13   411 (R5) BT 258 20 BT CW 8-2-2004 Sun 0530 (MS)
4687.0 M13   411 (R5) BT 258 20 BT CW 22-2-2004 Sun 0530 (MS)
4780.0 E10   VLB2//3360 USB 17-2-2004 Tue 0145 (BS4)
4792   G06   436-589/ 47=09172 (AM) 27-2-2004 Fri 1930 (HFD)
4874   M89   V LA5S LA5S LA5S DE NH8T NH8T CW 9-2-2004   (TY)
4880.0 E10   ULX2 USB 4-2-2004 Wed 0200 (BS4)
4880.0 E10   ULX 65 FUBTB USB 6-2-2004 Fri 1930 (GG)
4880.0 E10   ULX USB 7-2-2004 Sat 0400 (BS4)
4880.0 E10   ULX2 USB 10-2-2004 Tue 0400 (BS4)
4880.0 E10   ULX2 USB 10-2-2004 Tue 2200 (BS4)
4880.0 E10   ULX2 USB 10-2-2004 Tue 2230 (BS4)
4880.0 E10   ULX USB 11-2-2004 Wed 0230 (BS4)
4880.0 E10   ULX2 USB 18-2-2004 Wed 0030 (BS4)
4880.0 E10   ULX USB 18-2-2004 Wed 0200 (BS4)
4880.0 E10   ULX2 USB 19-2-2004 Thu 0330 (BS4)
4880.0 E10   ULX 111 DSAEQ USB 20-2-2004 Fri 0230 (BS4)
4880.0 E10   ULX2 USB 20-2-2004 Fri 2230 (BS4)
4880.0 E10   ULX USB 21-2-2004 Sat 2230 (BS4)
4880.0 E10   ULX2 USB 28-2-2004 Sat 2200 (BS4)
5001.3 M22   4XZ. VVV marker CW 3-2-2004 1835 (KK2)
5027.0 M10   555x3 (Too weak, uncopiable)(//freq 3522m) CW
               14-2-2004 Sat 0210 (MS)
5027.0 M10   555x3 (Too weak, uncopiable) CW 14-2-2004 Sat 0410

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5028    S10D   555: 344-82/23=92636, 317-12/40=04240 (AM) 16-2-2004
               Mon 1740 (HFD)
5030.0  S10D   transmission already in progress at 17:40 AM 3-2-2004
               Tue 0017 (CHZ)
5063    M21    Russian Air Defense. =1830516 23 CW 7-2-2004  0723
5090    E07    970:1-1562/28= 85865 (AM) 2-2-2004 Mon 2140 (HFD)
5091.0  E10    JSR2 USB 6-2-2004 Fri 1930 (GG)
5091.0  E10    JSR 34 QQFRU USB 10-2-2004 Tue 2200 (BS4)
5091.0  E10    JSR 118 WDAOQ USB 10-2-2004 Tue 2230 (BS4)
5091.0  E10    E10, fair/readable on receiver in Sweden, JSR passing
               45 grp m USB 11-2-2004 Wed 1900 (CA2)
5091.0  E10    JSR in tfc USB 20-2-2004 Fri 2230 (BS4)
5091.0  E10    JSR 49 BHMWQ USB 23-2-2004 Mon 1830 (GG)
5091.0  E10    JSR 49 BHMYQ USB 24-2-2004 Tue 1830 (GG)
5091.0  E10    JSR 49 BHMYQ USB 25-2-2004 Wed 1830 (GG)
5091.0  E10    JSR 49 BHMYQ USB 26-2-2004 Thu 1830 (GG)
5091.0  E10    JSR USB 26-2-2004 Thu 2230 (BS4)
5091.0  E10    JSR 10 IDHIZ (start-up : mixed with FTJ2) USB
               27-2-2004 Fri 1830 (GG)
5091.0  E10    JSR 59 QGJPA USB 27-2-2004 Fri 1930 (GG)
5091.0  E10    JSR 10 IDHIZ USB 28-2-2004 Sat 1830 (GG)
5091.0  E10    JSR 10 IDHIZ USB 29-2-2004 Sun 1830 (GG)
5152    XP     msg (AM) 3-2-2004 Tue 2140 (HFD)
5152.0  XP     USB 24-2-2004 Tue 2141 (OV)
5154    MX     Cluster beacon "C". Faster than normal CW 6-2-2004 Fri
                2245 (AB)
5159    M22    4XZ. VVV marker CW 22-2-2004  1918 (TY)
5160.0  M22    == vvv de 4xz 4xz == CW 28-2-2004 Sat 0130 (OV)
5170.0  E10    E10, weak/readable on receiver in Sweden, calling
               SYN2, null m USB 11-2-2004 Wed 1845 (CA2)
5170.0  E10    SYN2//3640 USB 17-2-2004 Tue 0145 (BS4)
5230.0  E10    E10, fair/readable on receiver in Sweden, calling
               CIO2, null m USB 11-2-2004 Wed 1845 (CA2)
5230.0  E10    CIO2//3270 USB 17-2-2004 Tue 0145 (BS4)
5247    M13    284 (CW) 6-2-2004 Fri 2100 (HFD)
5254    M21    Russian Air Defense. Voice tracking reports: 096 91515
                03 USB 7-2-2004  0703 (JUM)
5254    M21    Russian Air Defense. Voice tracking reports USB
               8-2-2004  2155 (JUM)
5272.0  S17c   S17c, weak/readable on receiver in Sweden, i/p USB
               1-2-2004 Sun 2050 (CA2)
5360    G06    308:0 (AM) 2-2-2004 Mon 2000 (HFD)
5382    M89    V LA5S LA5S LA5S DE NH8T NH8T CW 9-2-2004   (TY)
5434.4  E10    ART 114 VHMGW USB 12-2-2004 Thu 0030 (GG)
5435    E10    in progress AM 26-2-2004 Thu 1949 (EB)
5435.0  E10    ART 61 JYKTT, 65 RRSPO USB 4-2-2004 Wed 0200 (BS4)
5435.0  E10    ART2 USB 4-2-2004 Wed 2330 (BS4)
5435.0  E10    ART and ULX calling and in tfc, usual ART RF USB
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		9-2-2004 Mon 0200 (BS4)
5435.0	E10	ART 16 IZIJF USB 9-2-2004 Mon 2300 (BS4)
5435.0	E10	ART 121 EAZCJ//6986 USB 10-2-2004 Tue 0400 (BS4)
5435.0	E10	E10, fair/readable on rcvr in Sweden, back on air calling ART2 USB 11-2-2004 Wed 2230 (CA2)
5435.0	E10	ART2 USB 17-2-2004 Tue 2330 (BS4)
5435.0	E10	ART USB 18-2-2004 Wed 0200 (BS4)
5435.0	E10	ART USB 21-2-2004 Sat 0500 (BS4)
5435.0	E10	ART2//3415 USB 21-2-2004 Sat 2230 (BS4)
5435.0	E10	ART USB 23-2-2004 Mon 0200 (BS4)
5435.0	E10	ART2 USB 24-2-2004 Tue 2330 (BS4)
5435.0	E10	ART 16 IZIJF USB 25-2-2004 Wed 2300 (BS4)
5435.0	E10	ART2//3415 USB 26-2-2004 Thu 2230 (BS4)
5435.0	E10	ART 16 IZIJF USB 26-2-2004 Thu 2300 (BS4)
5435.0	E10	ART2 USB 27-2-2004 Fri 1900 (GG)
5435.0	E10a	E10a, fair/readable on rcvr in Sweden, 2 msgs, 1st 95 grps, 1s USB 11-2-2004 Wed 2200 (CA2)
5435.0	E10a	E10a, fair/readable on rcvr in Sweden, Called ART2 once and we USB 11-2-2004 Wed 2230 (CA2)
5437.0	E10	ART 24 EZZSM USB 2-2-2004 Mon 0030 (GG)
5437.0	E10	ART 24 ????? USB 3-2-2004 Tue 0030 (GG)
5437.0	E10	ART 24 EZJSM USB 8-2-2004 Sun 0030 (GG)
5437.0	E10	ART 24 EZZSM USB 9-2-2004 Mon 0030 (GG)
5437.0	E10	ART 24 EZZSM USB 10-2-2004 Tue 0030 (GG)
5437.0	E10	ART2 USB 13-2-2004 Fri 0030 (GG)
5437.0	E10	ART2 USB 14-2-2004 Sat 0030 (GG)
5437.0	E10	ART2 USB 15-2-2004 Sun 0030 (GG)
5437.0	E10	ART 2 msgs: 43 QV?T?/34 ??N?? USB 17-2-2004 Tue 0030 (GG)
5437.0	E10	ART 1?2 R?RVO USB 19-2-2004 Thu 0030 (GG)
5437.0	E10	ART2 USB 20-2-2004 Fri 0030 (GG)
5437.0	E10	ART2 USB 21-2-2004 Sat 0030 (GG)
5437.0	E10	ART 2 msgs: 43 QVHTH/34 ??NWU USB 22-2-2004 Sun 0030 (GG)
5437.0	E10	ART2 USB 23-2-2004 Mon 0030 (GG)
5437.0	E10	ART 2 msgs: 92 RHQKG/67 ?ZQ?U USB 24-2-2004 Tue 0030 (GG)
5437.0	E10	ART2 USB 26-2-2004 Thu 0030 (GG)
5437.0	E10	ART2 USB 27-2-2004 Fri 0030 (GG)
5437.0	E10	ART2 USB 28-2-2004 Sat 0030 (GG)
5437.0	E10	ART2 USB 29-2-2004 Sun 0030 (GG)
5465	M01	197 (CW) 1-2-2004 Sun 0700 (HFD)
5580	M89	V MW3D MW3D MW3D DE 2SLC 2SLC CW 8-2-2004 (TY)
5629.3	M89	V GM3W GM3W GM3W DE PNW9 PNW9 CW 21-1-2004 (TY)
5735	M13	261 (CW) 2-2-2004 Mon 2000 (HFD)
5735	M13	261 (CW) 2-2-2004 Mon 2100 (HFD)
5820.0	E10	YHF USB 10-2-2004 Tue 0130 (GG)
5820.0	E10	YHF USB 10-2-2004 Tue 0400 (GG)

5820.0 E10   YHF 42 PHAAH USB 12-2-2004 Thu 0130 (GG)
5820.0 E10   YHF 42 PHAAH USB 13-2-2004 Fri 0130 (GG)
5820.0 E10   YHF 42 PHAAH USB 14-2-2004 Sat 0130 (GG)
5820.0 E10   YHF weak USB 14-2-2004 Sat 0400 (GG)
5820.0 E10   YHF 72 AQLCW/7918 AM 24-2-2004 Tue 1800 (JS3)
5820.0 E10   YHF 15 ATZIE USB 27-2-2004 Fri 1900 (GG)
5904.0 S17c   S17c, weak/readable on receiver in Sweden, i/p USB
               1-2-2004 Sun 2050 (CA2)
5924   V27   Chinese YL numbers LSB 21-2-2004 0435 (TY)
5932   E07   733:0 (AM) 19-2-2004 Thu 2130 (HFD)
6249.0 XSL   USB 6-2-2004 Fri 1300 (JK)
6270   E10   ULX1 AM 20-2-2004   (AY)
6270.0 E10   ULX2 USB 2-2-2004 Mon 0100 (GG)
6270.0 E10   ULX2 USB 3-2-2004 Tue 0100 (GG)
6270.0 E10   ULX2 USB 5-2-2004 Thu 0100 (GG)
6270.0 E10   ULX2 USB 6-2-2004 Fri 0100 (GG)
6270.0 E10   ULX2 USB 7-2-2004 Sat 0100 (GG)
6270.0 E10   ULX2 USB 8-2-2004 Sun 0100 (GG)
6270.0 E10   ULX2 USB 9-2-2004 Mon 0100 (GG)
6270.0 E10   ULX2//7760 USB 9-2-2004 Mon 0100 (BS4)
6270.0 E10   ULX2 USB 9-2-2004 Mon 0430 (GG)
6270.0 E10   ULX2 USB 9-2-2004 Mon 2300 (BS4)
6270.0 E10   ULX2 USB 13-2-2004 Fri 0100 (GG)
6270.0 E10   ULX2 USB 14-2-2004 Sat 0100 (GG)
6270.0 E10   ULX2 USB 15-2-2004 Sun 0100 (GG)
6270.0 E10   ULX2 USB 19-2-2004 Thu 0100 (GG)
6270.0 E10   ULX2 USB 20-2-2004 Fri 0100 (GG)
6270.0 E10   ULX2 (RTTY QRN) USB 21-2-2004 Sat 0100 (GG)
6270.0 E10   ULX2 USB 22-2-2004 Sun 0100 (GG)
6270.0 E10   ULX in tfc USB 25-2-2004 Wed 2300 (BS4)
6270.0 E10   ULX2 USB 26-2-2004 Thu 0100 (GG)
6270.0 E10   ULX2 USB 27-2-2004 Fri 0100 (GG)
6270.0 E10   ULX2 USB 28-2-2004 Sat 0100 (GG)
6270.0 E10   ULX2 USB 29-2-2004 Sun 0100 (GG)
6350   M13   254 (CW) 19-2-2004 Thu 2200 (HFD)
6379   M22   4XZ. VVV marker CW 22-2-2004 1918 (TY)
6455   M13A   463:0 (CW) 10-2-2004 Tue 2100 (HFD)
6455   M13A   463:0 (CW) 23-2-2004 Mon 2100 (HFD)
6488   V27   Chinese YL numbers LSB 21-2-2004 0435 (TY)
6498.0 E10   in progress USB 1-2-2004 Sun 0035 (GG)
6498.0 E10   PCD USB 10-2-2004 Tue 2230 (BS4)
6498.0 E10   PCD1 USB 18-2-2004 Wed 0030 (BS4)
6498.0 E10   PCD2 USB 19-2-2004 Thu 0330 (BS4)
6498.0 E10   PCD USB 20-2-2004 Fri 2230 (BS4)
6498.0 E10   PCD USB 21-2-2004 Sat 2230 (BS4)
6498.0 E10   PCD USB 26-2-2004 Thu 2230 (BS4)
6498.0 E10   PCD 110 EEGFM//8805 USB 29-2-2004 Sun 0430 (BS4)
6732   E07   970:1-1562/28= 85862 (AM) 2-2-2004 Mon 2120 (HFD)

6739.0	E10	multiple stations heard sending one way messages in intl phoen USB 12-2-2004 Thu 0300 (IO)
6767	XP	msg (AM) 3-2-2004 Tue 2120 (HFD)
6767.0	XP	USB 24-2-2004 Tue 2123 (OV)
6797.0	M08a	M8a, late, fair/readable, into message USB 4-2-2004 Wed 1200 (CA2)
6797.0	M08a	M8a, strong/readable, into message USB 6-2-2004 Fri 1200 (CA2)
6840.0	E10	EZI 80 QDVN? USB 4-2-2004 Wed 2330 (BS4)
6840.0	E10	EZI USB 8-2-2004 Sun 2030 (BS4)
6840.0	E10	EZI2//9130 USB 9-2-2004 Mon 0100 (BS4)
6840.0	E10	EZI 68 ZNGOW//9130 USB 10-2-2004 Tue 2200 (BS4)
6840.0	E10	EZI 93 VRWPN USB 11-2-2004 Wed 0230 (BS4)
6840.0	E10	EZI 85 ZYQBJ, ?? ?????//9130 USB 17-2-2004 Tue 2330 (BS4)
6840.0	E10	EZI2//9130 USB 19-2-2004 Thu 0330 (BS4)
6840.0	E10	EZI ?? ?????, 51 WEMCG USB 20-2-2004 Fri 0230 (BS4)
6840.0	E10	EZI//9130 USB 21-2-2004 Sat 0530 (BS4)
6840.0	E10	EZI 66 YOEGX//9130 USB 23-2-2004 Mon 0230 (BS4)
6840.0	E10	EZI 86, SDBGN USB 23-2-2004 Mon 2130 (BS4)
6840.0	E10	EZI 70 ZQUZC, ?? ????? USB 24-2-2004 Tue 2330 (BS4)
6840.0	E10	Not quite AM, more like USB with carrier. Lower sideband not p AM 26-2-2004 Thu 0238 (MBS)
6840.0	E10	EZI 86 SDBGN//9130 USB 27-2-2004 Fri 0130 (BS4)
6840.0	E10	EZI in tfc//9130 USB 28-2-2004 Sat 2030 (BS4)
6840.0	E10	EZI 67 IEJKO//9130 USB 28-2-2004 Sat 2200 (BS4)
6873	E07	73#:0 (AM) 12-2-2004 Thu 2110 (HFD)
6873	E07	733:0 (AM) 26-2-2004 Thu 2110 (HFD)
6906	M21	Russian Air Defense. =99253??8????? CW 5-2-2004 2353 (JUM)
6933.0	M08a	ID 96173 78091 04721 CW 10-2-2004 Tue 1200 (MS)
6933.0	M08a	ID 52471 48352 82632 CW 14-2-2004 Sat 1200 (MS)
6934	E07	913:0 (AM) 4-2-2004 Wed 0610 (HFD)
6959.0	E03	USB 29-2-2004 Sun 1900 (FR)
6986.0	E10	ART 121 EAZCJ USB 7-2-2004 Sat 0400 (BS4)
6986.0	E10	ART 121 EAZCJ//5435 USB 10-2-2004 Tue 0400 (BS4)
6986.0	E10	ART 33 TRVBH USB 20-2-2004 Fri 0430 (BS4)
6986.0	E10	ART2 USB 21-2-2004 Sat 0530 (BS4)
6986.0	E10	ART USB 29-2-2004 Sun 0430 (BS4)
6992.0	M13	501 (R5) BT 237 21 BT CW 1-2-2004 Sun 2215 (MS)
6993.0	M13	501 (R5) BT 237 21 BT CW 22-2-2004 Sun 2215 (MS)
7039	MX	Cluster beacon "C". Faster than normal CW 6-2-2004 Fri 2245 (AB)
7039.8	MX	"M" Russian Magadan Marker. Still off normal freq of 7039.4. CW 8-2-2004 2321 (JUM)
7040.0	MX	Beacon "C" active, fair/readable on receiver in Sweden USB 8-2-2004 Sun 1953 (CA2)
7074	M89	V MW3D MW3D MW3D DE 2SLC 2SLC CW 8-2-2004 (TY)

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7320.0  M08a   M8a, strong/readable, S9+10dB, ID is 62753 12131 36461
               USB 2-2-2004 Mon 1300 (CA2)
7320.0  M08a   M8a, strong/unreadable due to nasty high pitch hum
               that sounds USB 4-2-2004 Wed 1300 (CA2)
7320.0  M08a   M8a, strong/readable, ID is 05414 99162 63872 USB
               6-2-2004 Fri 1300 (CA2)
7439    E11    312/00 (AM) 20-2-2004 Fri 1230 (HFD)
7519.0  M08a   M8a, weak/readable, i/p USB 2-2-2004 Mon 2200 (CA2)
7519.0  M08a   M8a, fair/readable, i/p USB 4-2-2004 Wed 2200 (CA2)
7519.0  M08a   ID 14223 925.4 05144 (Voice QRM blocks heavily) CW
               9-2-2004 Mon 2200 (MS)
7519.0  M08a   ID 20334 87635 75645 CW 27-2-2004 Fri 2200 (MS)
7525    M08a   xut numbers CW 3-2-2004  2210 (RP3)
7526    XP     msg (AM) 3-2-2004 Tue 2100 (HFD)
7526.0  M08a   M8a, fair/readable, into message USB 3-2-2004 Tue 2200
               (CA2)
7526.0  M08a   ID 14204 23911 49691 CW 10-2-2004 Tue 2200 (MS)
7540.0  E10    JSR USB 8-2-2004 Sun 2030 (BS4)
7540.0  E10    JSR in tfc USB 28-2-2004 Sat 2030 (BS4)
7567    M13    517 (CW) 2-2-2004 Mon 2000 (HFD)
7567    M13    517 (CW) 2-2-2004 Mon 2100 (HFD)
7567    M13    517 (CW) 3-2-2004 Tue 2100 (HFD)
7749    E11    312/00 (AM) 3-2-2004 Tue 1030 (HFD)
7749    E11    312/00 (AM) 20-2-2004 Fri 1030 (HFD)
7760.0  E10    ULX2 USB 1-2-2004 Sun 0100 (GG)
7760.0  E10    ULX2//6270 USB 9-2-2004 Mon 0100 (BS4)
7760.0  E10    ULX2 USB 9-2-2004 Mon 0430 (GG)
7760.0  E10    ULX2 USB 10-2-2004 Tue 0100 (GG)
7760.0  E10    ULX2 USB 20-2-2004 Fri 0430 (BS4)
7760.0  E10    ULX2 USB 21-2-2004 Sat 0530 (BS4)
7760.0  E10    ULX2 USB 29-2-2004 Sun 0430 (BS4)
7890.0  M08a   M8a, strong/readable, ID is 02132 79122 85411 USB
               3-2-2004 Tue 1300 (CA2)
7890.0  M08a   USB 3-2-2004 Tue 1300 (CA2)
7890.0  M08a   M8a, strong/readable, ID is 55413 59161 23891 USB
               5-2-2004 Thu 1300 (CA2)
7890.0  M08a   ID 96173 78091 04721 (rpt of 1200z on 6933m) CW
               10-2-2004 Tue 1300 (MS)
7890.0  M08a   ID 52471 48352 82632 (rpt of 1200z on 6933m) CW
               14-2-2004 Sat 1300 (MS)
7918    E07    970:0-1562/28= 85865 (AM) 2-2-2004 Mon 2100 (HFD)
7918.0  E10    YHF 22 JEOMR//9202 USB 4-2-2004 Wed 0200 (BS4)
7918.0  E10    YHF//9202 USB 8-2-2004 Sun 2030 (BS4)
7918.0  E10    YHF2 USB 9-2-2004 Mon 0200 (BS4)
7918.0  E10    YHF USB 10-2-2004 Tue 0130 (GG)
7918.0  E10    YHF 78 WIIEY, 71 YWHVR//9202 USB 18-2-2004 Wed 0200
               (BS4)
7918.0  E10    YHF 78 WIIEY, ?? ????//9202 USB 23-2-2004 Mon 0200
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(BS4)
7918.0 E10 YHF 72 AQLCW/5820 AM 24-2-2004 Tue 1800 (JS3)
7918.0 E10 YHF 42 PHAHH USB 27-2-2004 Fri 0130 (BS4)
7918.0 E10 YHF 41 NUIKM//9202 USB 28-2-2004 Sat 2030 (BS4)
7926 M13 714 (CW) 26-2-2004 Thu 2100 (HFD)
7926.0 M13 714 (R5) (Too weak, signal fades out, uncopiable) CW 13-2-2004 Fri 2100 (MS)
7926.0 M13 714 (R5) BT 233 21 BT CW 27-2-2004 Fri 2100 (MS)
8009.0 M08a M8a, fair/readable, i/p USB 4-2-2004 Wed 2300 (CA2)
8009.0 M08a ID 35091 23912 49692 CW 11-2-2004 Wed 2300 (MS)
8042 M89 V LA5S LA5S LA5S DE NH8T NH8T CW 11-2-2004 0615 (JUM)
8080 M13 228 (CW) 12-2-2004 Thu 1600 (HFD)
8097.0 V02a AM 18-2-2004 Wed 0545 (RG2)
8097.0 V02a i/p; down at :46 AM 19-2-2004 Thu 0545 (BM)
8103 M22 4XZ. VVV marker CW 2-2-2004 2153 (RP3)
8103 M22 4XZ. VVV marker CW 22-2-2004 1918 (TY)
8107 M13 253 (CW) 5-2-2004 Thu 2100 (HFD)
8107 M13 253 (CW) 19-2-2004 Thu 2100 (HFD)
8135 E07 419:0 (AM) 25-2-2004 Wed 1820 (HFD)
8135.0 M08a M8a, fair/readable/ i/p USB 5-2-2004 Thu 2300 (CA2)
8135.0 M08a ID 14204 23911 49691 (rpt of 2200z on 7526m) CW 10-2-2004 Tue 2300 (MS)
8135.0 M08a ID 20334 87635 75645 (rpt of 2200z on 7519m) CW 27-2-2004 Fri 2300 (MS)
8136.0 M08a ID 24401 82244 15722 CW 8-2-2004 Sun 1000 (MS)
8136.0 M08a ID 71281 17871 27002 CW 14-2-2004 Sat 1100 (MS)
8136.0 M08a ID 06091 20573 77063 (can hear 3926m sked in background) CW 15-2-2004 Sun 1000 (MS)
8136.0 V02a (in progress - weak and distorted signal - YL/SS) CW 15-2-2004 Sun 0900 (MS)
8186.0 V02a xmitter problems AM carrier would only be present when there AM 19-2-2004 Thu 0007 (Vambo)
8232 M40 VVV CQ 747. 816 - CQ 816 CQ 816 HR HR 36 36 = = Then numbers, ending AR AR SK SK CW 24-12-2003 2235 (AJP)
8495.2 MX "F" Russian Vladivostok Marker CW 8-2-2004 2322 (JUM)
8495.4 MX "M" Russian Magadan Marker CW 8-2-2004 2322 (JUM)
8496.0 MX Beacon "C" active, weak/readable on receiver in Sweden USB 8-2-2004 Sun 1954 (CA2)
8621 V27 Chinese YL numbers LSB 21-2-2004 0435 (TY)
8805.0 E10 PCD 110 EEGFM//6498 AM 29-2-2004 Sun 0430 (BS4)
9062.0 M08a ID 83804 18763 29811 CW 1-2-2004 Sun 0500 (MS)
9130.0 E10 EZI2 USB 4-2-2004 Wed 0200 (BS4)
9130.0 E10 EZI2//6840 USB 9-2-2004 Mon 0100 (BS4)
9130.0 E10 EZI2 AND YHF2 simultaneously, usual RF for EZI USB 9-2-2004 Mon 0200 (BS4)
9130.0 E10 EZI 78 XJING//11565 USB 10-2-2004 Tue 0300 (BS4)
9130.0 E10 EZI 68 ZNGOW//6840 USB 10-2-2004 Tue 2200 (BS4)
9130.0 E10 EZI 109 EBWYH USB 10-2-2004 Tue 2230 (BS4)

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9130.0  E10    EZI 85 ZYQBJ, ?? ?????//6840 USB 17-2-2004 Tue 2330
               (BS4)
9130.0  E10    EZI2 USB 18-2-2004 Wed 0200 (BS4)
9130.0  E10    EZI 173 VKJMS USB 19-2-2004 Thu 0300 (BS4)
9130.0  E10    EZI2//6840 USB 19-2-2004 Thu 0330 (BS4)
9130.0  E10    EZI2 USB 20-2-2004 Fri 0430 (BS4)
9130.0  E10    EZI USB 20-2-2004 Fri 2230 (BS4)
9130.0  E10    EZI//6840 USB 21-2-2004 Sat 0530 (BS4)
9130.0  E10    EZI USB 21-2-2004 Sat 2230 (BS4)
9130.0  E10    EZI USB 22-2-2004 Sun 0300 (BS4)
9130.0  E10    EZI USB 22-2-2004 Sun 2000 (BS4)
9130.0  E10    EZI 66 YOEGX//6840 USB 23-2-2004 Mon 0230 (BS4)
9130.0  E10    EZI 109 EBWYH USB 26-2-2004 Thu 2230 (BS4)
9130.0  E10    EZI 86 SDBGN//6840 USB 27-2-2004 Fri 0130 (BS4)
9130.0  E10    EZI 38 BVGGM USB 27-2-2004 Fri 1830 (GG)
9130.0  E10    EZI 80 AE??? USB 27-2-2004 Fri 1900 (GG)
9130.0  E10    EZI2 USB 28-2-2004 Sat 1930 (BS4)
9130.0  E10    EZI 67 IEJKO//13533 USB 28-2-2004 Sat 2000 (BS4)
9130.0  E10    EZI in tfc//6840 USB 28-2-2004 Sat 2030 (BS4)
9130.0  E10    EZI in tfc USB 28-2-2004 Sat 2130 (BS4)
9130.0  E10    EZI 67 IEJKO//6840 USB 28-2-2004 Sat 2200 (BS4)
9130.0  E10    EZI USB 29-2-2004 Sun 0430 (BS4)
9152.0  M08a   ID 71281 17871 27002 (rpt of 1100z on 10346m - signal
               extremel CW 14-2-2004 Sat 1200 (MS)
9153.0  V02a   V2a, fair/readable, into message, fast uno USB
               6-2-2004 Fri 1300 (CA2)
9165    S17C   83037 (AM) 5-2-2004 Thu 1250 (HFD)
9165    S17C   76027 (AM) 6-2-2004 Fri 1250 (HFD)
9165    S17C   77031 (AM) 7-2-2004 Sat 1250 (HFD)
9165    S17C   84027 (AM) 8-2-2004 Sun 1250 (HFD)
9165    S17C   87038 (AM) 10-2-2004 Tue 1250 (HFD)
9165    S17C   84031 (AM) 11-2-2004 Wed 1250 (HFD)
9165    S17C   86028 (AM) 12-2-2004 Thu 1250 (HFD)
9165    S17C   81034 (AM) 13-2-2004 Fri 1250 (HFD)
9165    S17C   76030 (AM) 14-2-2004 Sat 1250 (HFD)
9165    S17C   82029 (AM) 16-2-2004 Mon 1250 (HFD)
9165    S17C   7#029 (AM) 17-2-2004 Tue 1250 (HFD)
9165    S17C   71028 (AM) 19-2-2004 Thu 1250 (HFD)
9165    S17C   76028 (AM) 21-2-2004 Sat 1250 (HFD)
9165    S17C   96030 (AM) 24-2-2004 Tue 1250 (HFD)
9165    S17C   86030 (AM) 27-2-2004 Fri 1250 (HFD)
9166.0  S17c   S17c, fair/readable on receiver in Sweden, ID is 99022
                maybe? USB 2-2-2004 Mon 1250 (CA2)
9202.0  E10    YHF 22 JEOMR//7918 USB 4-2-2004 Wed 0200 (BS4)
9202.0  E10    YHF//7918 USB 8-2-2004 Sun 2030 (BS4)
9202.0  E10    EZI2, usual RF for YHF USB 9-2-2004 Mon 0200 (BS4)
9202.0  E10    YHF weak USB 12-2-2004 Thu 0400 (GG)
9202.0  E10    YHF 78 WIIEY, 71 YWHVR//7918 USB 18-2-2004 Wed 0200
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(BS4)
9202.0 E10 YHF 13 WQJNA USB 20-2-2004 Fri 0430 (BS4)
9202.0 E10 EZI 89 QNQKK, ?? ????? USB 21-2-2004 Sat 0530 (BS4)
9202.0 E10 YHF 78 WIIEY, ?? ????//7918 USB 23-2-2004 Mon 0200 (BS4)
9202.0 E10 YHF 41 NUIKM//7918 USB 28-2-2004 Sat 2030 (BS4)
9202.0 E10 YHF USB 29-2-2004 Sun 0430 (BS4)
9238.0 M08a ID 24401 82244 15722 (rpt of 1000z on 8136m) CW 8-2-2004 Sun 1100 (MS)
9238.0 M08a ID 06091 20573 77063 (rpt of 1000z on 8136m) CW 15-2-2004 Sun 1100 (MS)
9323.0 M08a ID ----- 30301 ----- CW 10-2-2004 Tue 1000 (MS)
9323.0 M08a ID 71281 17871 27002 CW 14-2-2004 Sat 1000 (MS)
9323.0 M08a ID 91091 95002 65772 (rpt of 0800z on 10236m) CW 15-2-2004 Sun 0900 (MS)
9402 E07 419:0 (very weak) (AM) 4-2-2004 Wed 1800 (HFD)
9402 E07 419:0 (AM) 18-2-2004 Wed 1800 (HFD)
9402 E07 419:0 (AM) 25-2-2004 Wed 1800 (HFD)
10046 M22 4XZ. VVV marker CW 28-1-2004 1954 (RP3)
10046 M22 VVV DE 4XZ = = AR AR NW RPT NR 7801 V BU4K TEG1N2 WT4K GR 79 == then into 5-letter groups CW 29-1-2004 2158 (RP3)
10046 M22 4XZ. VVV marker CW 5-2-2004 0050 (RP3)
10046 M22 4XZ. VVV marker CW 6-2-2004 2007 (RP3)
10046 M22 4XZ. VVV marker CW 22-2-2004 1918 (TY)
10046.0 M22 into message CW 11-2-2004 Wed 0118 (TN)
10125.0 M08a M8a, fair/readable, ID is 89924 40912 57513 USB 3-2-2004 Tue 0300 (CA2)
10126.0 M08a ID ----- 95001 65771 CW 14-2-2004 Sat 0900 (MS)
10234.0 M08a M8a, fair/readable, into message USB 1-2-2004 Sun 0400 (CA2)
10235.0 M08a (in progress) CW 8-2-2004 Sun 0400 (MS)
10236.0 M08a ID 91091 95002 65772 CW 15-2-2004 Sun 0800 (MS)
10346.0 M08a ID 41122 78752 34921 CW 10-2-2004 Tue 1100 (MS)
10346.0 M08a ID 71281 17871 27002 (rpt of 1000z on 9323m) CW 14-2-2004 Sat 1100 (MS)
10426 E03 LP id 50193 USB 2-2-2004 2205 (RP3)
10446.0 V02a V2a, fair/readable, ID is 79403 69821 87503 USB 2-2-2004 Mon 0300 (CA2)
10620 M40 VVV CQ747 . 494 VVV CQ 747 . 494 CQ 494 HR HR 1T 1T = = (Nβ) + AR SK SK CW 6-2-2004 2235 (AJP)
10648.0 E10 YHF 54 MIZJZ USB 21-2-2004 Sat 0500 (BS4)
10872.2 MX "F" Russian Vladivostok Marker CW 8-2-2004 2319 (JUM)
10873.3 MX "K" Russian Petropavlovsk-Kamchatskiy Marker CW 8-2-2004 2319 (JUM)
10873.4 MX "M" Russian Magadan Marker CW 8-2-2004 2319 (JUM)
11150 M42 Dept of State Comms. Msg on link 00020 RTTY 5-2-2004 0930 (ML2)

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11545.0  E03    E3, weak/readable, into message USB 1-2-2004 Sun 1400
                (CA2)
11545.0  E03    USB 1-2-2004 Sun 1600 (JK)
11545.0  E03    USB 1-2-2004 Sun 1700 (JK)
11545.0  E03    in progress USB 27-2-2004 Fri 1927 (GG)
11565.0  E10    EZI 78 XJING//9130 USB 10-2-2004 Tue 0300 (BS4)
11565.0  E10    EZI 38 BVGGM USB 27-2-2004 Fri 1830 (GG)
12215.0  V02a   V2a, fair/readable, ID is 50154 59451 59810 USB
                3-2-2004 Tue 0200 (CA2)
12603    E03    LP in progress USB 24-2-2004  2118 (RP3)
12984    M22    4XZ. VVV marker CW 5-2-2004  0050 (RP3)
12984    M22    4XZ. Israeli navy Haifa CW 23-2-2004  2030 (RP3)
13366    V07    382:0 (AM) 5-2-2004 Thu 0600 (HFD)
13366    V07    382:0 (AM) 24-2-2004 Tue 0600 (HFD)
13375    E03    LP in progress USB 27-2-2004 Fri 1934 (EB)
13375.0  E03    in progress USB 27-2-2004 Fri 1927 (GG)
13436.0  V02a   V2a, strong/readable, S9+10 dB, almost no fading, into
                 message USB 3-2-2004 Tue 0100 (CA2)
13528.2  MX     "F" Russian Vladivostok Marker CW 8-2-2004  2323 (JUM)
13528.3  MX     "K" Russian Petropavlovsk-Kamchatskiy Marker CW
                8-2-2004  2323 (JUM)
13528.4  MX     "M" Russian Magadan Marker CW 8-2-2004  2323 (JUM)
13533    E10    EZI AM 20-2-2004  0900 (SP1)
13533    E10    in progress AM 24-2-2004 Wed 1744 (EB)
13533.0  E10    EZI 70 ZQUZC,  82 RNBNW USB 28-2-2004 Sat 1730 (BS4)
13533.0  E10    EZI 8? BV??M USB 28-2-2004 Sat 1830 (BS4)
13533.0  E10    EZI 67 IEJKO//9130 USB 28-2-2004 Sat 2000 (BS4)
14487.0  E03    E3, weak/readable, ID is 70244 USB 3-2-2004 Tue 1300
14487.0  E03    E3, weak/readable, ID is 70244 USB 4-2-2004 Wed 1300
                (CA2)
14487.0  E03    E3, weak/readable, ID is 70244 USB 6-2-2004 Fri 1300
14866    V07    382:0 (AM) 5-2-2004 Thu 0620 (HFD)
14866    V07    382:0 (AM) 24-2-2004 Tue 0620 (HFD)
14931    M16    8BY. DGSE. CW 1-2-2004  1453 (RP3)
14931    M16    8BY. DGSE. VVV 8BY 8BY 8BY 395 / 561 / 912 / 429 / 612
                 / 364 CW 23-2-2004  2058 (RP3)
15820    E06    107-154/163=05719 (AM) 26-2-2004 Thu 0700 (HFD)
16084    E03    LP USB 20-2-2004  1745 (RGA)
16331.9  MX     Cluster beacon "S", Arkhangelsk CW 3-2-2004  1440
16332.2  MX     "F" Russian Vladivostok Marker CW 8-2-2004  2325 (JUM)
16332.3  MX     "K" Russian Petropavlovsk-Kamchatskiy Marker CW
                8-2-2004  2325 (JUM)
16332.4  MX     "M" Russian Magadan Marker CW 8-2-2004  2325 (JUM)
17410    E10    in progress AM 20-2-2004  0840 (SP1)
18004    M22    DE 4XZ 4XZ = = AR AR NW RPE NR 7511. Later w/probable
                WMO IAC Fleet format FM46-IV wx message CW 31-1-2004
                1445 (RP3)
18864    E04    Cherry Ripe USB 8-2-2004  2208 (JUM)
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18864.0 E04   USB 3-2-2004 Tue 0000 (JK)
18864.0 E04   USB 4-2-2004 Wed 0000 (JK)
19884.0 E04   USB 3-2-2004 Tue 0100 (JK)
19884.0 E04   USB 4-2-2004 Wed 0100 (JK)
19884.0 E04   USB 5-2-2004 Thu 0100 (JK)
20048.3 MX   "K" Russian Petropavlovsk-Kamchatskiy Marker CW
                8-2-2004 2326 (JUM)
20946   M16   8BY. DGSE CW 6-2-2004 1650 (RP3)

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FR   Freddie, UK
GG   Gallus Galus, W.Europe
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JUM   Japan Ute Monitor
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